

REMARKS

I. Status of the Claims

Claims 1 - 5 stand rejected. Claims 1, 2, 4 and 5 have been amended. Claim 6 has been added.

II. Objection to the Drawings

The Office Action indicated a preference for an additional Figure illustrating the method steps of claim 5. Consistent with that preference, Applicants propose adding a Figure 4. A red-lined copy of the proposed figure is attached herewith, as is a Letter to the Draftsperson documenting the requested change.

Portions of the specification have been amended to include the newly added Figure, along with notations to the illustrated method steps. Applicants assert that no new matter has been entered.

III. Rejections Under 35 U.S.C. §112

The Office Action noted a rejection to claims 1 - 5 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The rejection pointed out several trivial matters which are believed to have been overcome with the amendments to claims 1, 2, 4 and 5.

IV. Rejection Under 35 U.S.C. §102

The Office Action identified rejections to claims 1 and 2 under 35 U.S.C. 102 as being anticipated by Wada et al (U.S. Patent No. 6,138,257). According to the Examiner, Wada allegedly discloses per-pin formatting circuitry, shared timing circuitry, and per-pin data circuitry.

As described in the background section of the instant application, the terms "per-pin" and "shared" have important meanings in the automatic test equipment art. Circuitry that is "per-pin" in nature has a copy of the circuit for each pin of the device being tested. For a device having 128 pins, there would be 128 copies of that circuitry for it to be a true "per-pin" circuit. Circuitry that is "shared", on the other hand, may use a portion of its resources for one group of pins, and another portion of its resources for another group.

It is well known that anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. In re Robertson, 169 F.3d 743, 49 U.S.P.Q.2d 1949 (Fed. Cir. 1999)(*reversing Board of Patent Appeals & Interference's finding of anticipation under §102*).

The Examiner alleges that Wada discloses both "per-pin" and "shared" circuits for testing a semiconductor device. A look at Figure 1, and a careful reading of the disclosure proves otherwise. Wada describes generalized circuit blocks that collectively form a system for testing a semiconductor device 71. Nowhere is there any disclosure that characterizes the system as including multiple copies of certain electronics for each pin ("per-pin"), nor is there any express disclosure whatsoever of any sharing of the circuitry to more than one pin (shared resource). Further, there is no disclosure whatsoever regarding testing of multiple devices in parallel.

Claim 1 recites a plurality of formatting circuits having a one-to-one correspondence with the pins of a device-under-test (in other words, per-pin formatting circuitry), shared timing circuitry, and a plurality of data circuits having a one-to-one correspondence with the pins of the device-under-test. Wada fails to disclose any of these limitations, and for this reason, claim 1 is believed allowable.

Because claim 2 depends from claim 1, it is also believed in condition for allowance.

V. Rejections Under 35 U.S.C. §103

The Office Action also identified rejections to claims 3-5 under 35 U.S.C. 103(a) as being unpatentable over Wada et al (U.S. Patent No. 6,138,257) in view of Aipperspach et al. (U.S. Patent No. 6,181,614).

It is well recognized that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

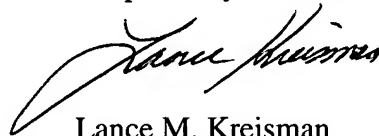
As noted above, Wada fails to disclose or remotely suggest most of the limitations of claims 1 and 2. For the same reasons, claims 3 - 5 are patentable over Wada and Aipperspach.

Further, new claim 6 is also believed patentable over the cited art for all of the above-identified reasons.

Applicants submit that all of the amendments and remarks set forth above place the claims in condition for allowance, and early notice thereof is respectfully solicited.

Please charge a two-month extension of time to Deposit Account No. 20-0515.

Respectfully Submitted



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